Fusion3

F200 3D Printer

MAINTENANCE:
LINEAR RAIL LUBRICATION

Revision 5/8/2025

LUBRICATING THE LINEAR RAILS

How to lubricate the linear rails on the F200.

LUBRICANT TO USE

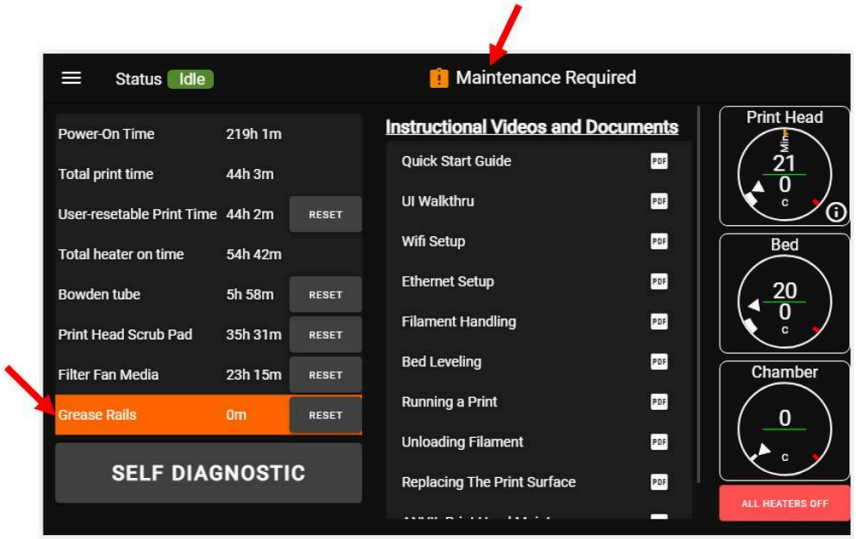
F200 linear rails can be lubricated with standard white lithium grease that can be found in many hardware or auto parts stores. The image here shows the brand we use in-house.

This grease must be put into an application syringe like the one shown below. The needle size should be approximately 1.7mm outer diameter. A sharp tip is not recommended. A rubber tip is also acceptable.

You can also use the same lubricant and applicator you use for EDGE rails but it's more expensive than lithium grease and is not strictly necessary for proper operation.

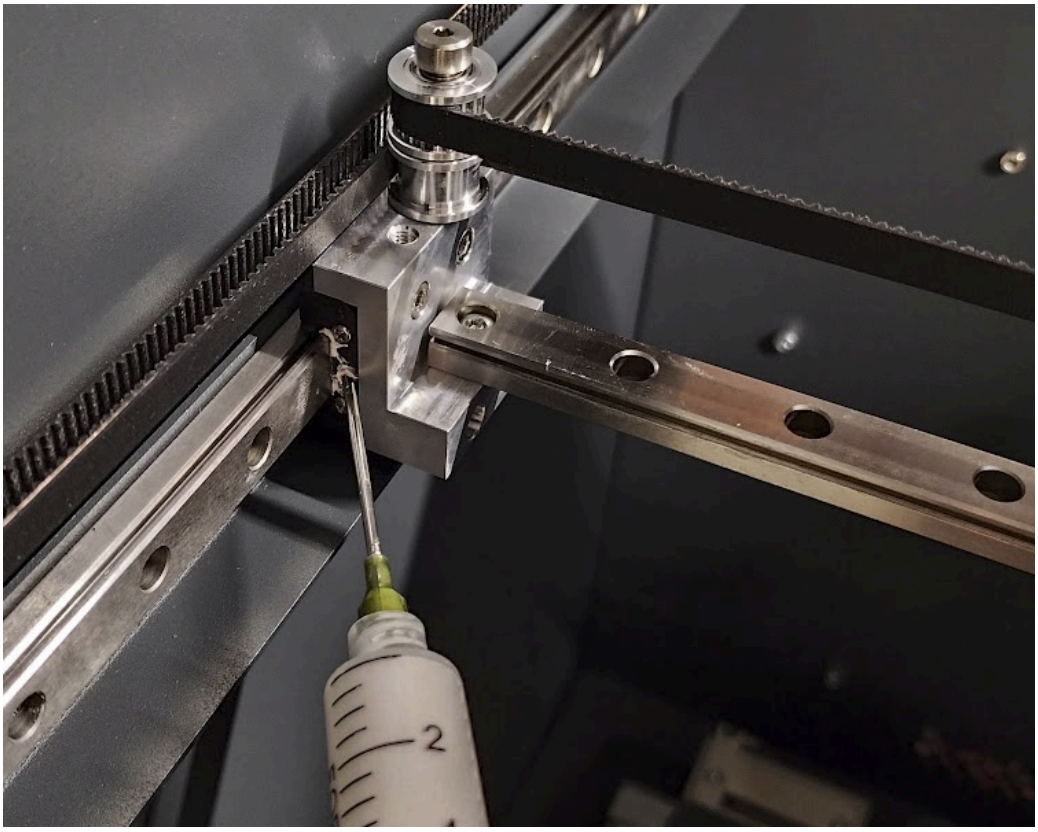
WHEN TO LUBRICATE

The on-board maintenance counters & reminders will prompt you when it is time to lubricate the rails.



HOW TO LUBRICATE

1. Make sure the printer is idle, off, and cold.
2. You should grease all 5 linear bearings at the same time (1X, 2Y, 2Z), and both sides of each bearing (10 lubricating points total).
3. Locate the small hole in the center of the linear bearing endcap. Insert the tip of the syringe into the hole. Don't press hard, as inserting the syringe too far can block the grease coming out of the syringe.



4. Gently and slowly press the plunger to dispense grease into the bearing. It can help to slide the bearing back and forth 20-30mm to help feed the grease into the bearing as you press on the plunger.
5. When you see some grease escape around the syringe tip, stop.
6. Repeat for the other side of the same bearing.
7. Repeat for all bearings (5 bearings, 10 endcaps total).
8. After you have done all the bearings in the machine, power the machine on and run the axes around by hand to spread the grease out inside the bearings. You may see some excess deposited on the rails; this is normal.

9. In the user interface, navigate to the *Maintenance* page and locate the "Grease Rails" timer. Press the "Reset" button to reset the timer.